

CLAIMS

- 1. A hard-copy output device including:**
 - 5 - a memory for storing location data,
 - a location-data input arrangement for receiving and storing location data in the memory,
 - a network interface, and
 - an HTTP location server for responding to client requests received via the network

10 interface to return location information comprising, or derived from, the location data stored in memory.

- 2. A device according to claim 1, wherein the input arrangement comprises a wireless interface for receiving the location data and an input manager for storing in the memory**
15 location data received over the wireless interface.

- 3. A hard-copy output device including:**
 - a wireless interface for receiving data,
 - a memory,
 - 20 - a location-data input manager for receiving location data via the wireless interface and storing it in the memory,
 - a network interface, and
 - a location server for responding to client requests received via the network interface to return location information comprising, or derived from, the location data stored in

25 memory.

- 4. A device according to claim 2 or claim 3, wherein the input manager is operative to cause the form of the received location data to be converted from a first form to a second form prior to storage in said memory, one of the first and second forms being a semantic**
30 location form and the other a form based on geographic coordinates.

5. A device according to claim 4, wherein the input manager effects said conversion by using a conversion service which it contacts over the network.
6. A device according to any one of claims 1 to 3, wherein the location server is operative 5 to cause the form of the stored location information to be converted from a first form to a second form for output in response to a said client request, one of the first and second forms being a semantic location form and the other a form based on geographic coordinates.
- 10 7. A device according to claim 6, wherein the location server effects said conversion by using a conversion service which it contacts over the network.
8. A device according to claim 1 or claim 2, wherein the received location data includes a reliability indicator which the input manager uses to determine whether or not to overwrite 15 existing location data, if any, held in said memory.
9. A device according to claim 8, wherein where the input manager decides to store the newly received location data, the related reliability indicator is also stored, the input manager when determining whether to store newly received location data, taking account 20 of the relative reliabilities of the stored and newly received information as indicated by their related reliability indicators.
10. A device according to claim 9, wherein said reliability indicator indicates whether the location data has been received directly from an entity with a primary source of location 25 data or from an entity which itself received the data from another entity, the input manager preferentially storing or retaining location data received directly from an entity with a primary source of location data.
- 30 11. A hard-copy output device including:
 - a memory,

- a location input subsystem for receiving location data and storing it in said memory, and
- a location output subsystem for accessing the stored location data and outputting it; at least one of the location input and output subsystems being operative to convert the location data it handles between a first form and a second form, one of the first and second forms being a semantic location form and the other a form based on geographic coordinates.

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12. A device according to claim 11, wherein the input subsystem receives location data in the form of geographic coordinates and converts the location data into semantic form.

13. A device according to claim 11, wherein the input subsystem receives location data in semantic form and converts the location data into geographic coordinates.

15 14. A device according to claim 12 or claim 13, wherein the input subsystem effects said conversion by using a remote conversion service.

15. A device according to claim 11, wherein the stored location data is in the form of geographic coordinates and the output subsystem converts this location data into semantic form before outputting it.

16. A device according to claim 11, wherein the stored location data is in the form of geographic coordinates and the output subsystem converts this location data into geographic coordinates before outputting it.

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17. A device according to claim 15 or claim 16, wherein the output subsystem effects said conversion by using a remote conversion service.

18. A device according to claim 11, further comprising a wireless output interface, the output subsystem being operative to output the location data via the wireless interface at intervals.

19. A device according to claim 11, further comprising a network interface, the output subsystem being operative to output said location data in response to a location request received over the network.